

REMARKS

This Amendment is filed in response to the final Office Action of December 18, 2008 in which claims 1-20 were rejected.

With regard to the Advisory Action, the Examiner is incorrect because he says that the “layer 106” in *Hong* is an “ohmic layer.” *Hong* unambiguously discloses that the layer 106 is a NON-ohmic layer that may act as a conductor in certain conditions (see e.g. column 4, lines 4-15, and Figs. 3, 4 and 5b). *Hong* refers to item “106” as a “NON-ohmic layer” throughout the specification.

In *Hong* there is also a good definition for “non-ohmic material” (column 3, lines 3-8) saying that “*the non-ohmic material acts as insulator below the specific voltage by passing through only fine current. On the other hand, the non-ohmic material device acts as conductor in voltage more than the specific voltage.*” Further *Hong* discloses “ohmic metal line” (column 2, line 29). This means that metal is an ohmic material.

The person skilled in the art is familiar with the Ohm’s Law  $V=RI$ , where  $V$  is voltage,  $I$  is current, and  $R$  is resistance. This law holds for all ohmic materials. Materials which do not obey this law are known as non-ohmic. An example of a non-ohmic material would be a diode, which has different resistances depending on which way the current is flowing through it. An example of an ohmic material would be a metal line, which resistance is not so dependent.

The Applicant amends claims 1-20 as shown enclosed. The phrase “electroconductive element” is added to be in the form “electroconductive METAL element.” Grounds for this amendment can be found from the original specification on page 4, lines 4-7.

Neither *Hong* nor *Hively* disclose ESD shielding that is carried out using an electroconductive metal element as disclosed in amended claims. **Both Hong and Hively completely rely on special characteristics of non-ohmic materials.**

*Hong* discloses ESD shielding provided by the “non-ohmic material element (106)” which acts as an insulator below a specific voltage and a conductor in voltage more than the specific voltage (*Hong* column 3, lines 3-8). *Hong* also cites that the resistance of the connection of the non-ohmic element depends on current and voltage (*Hong* column 4, lines 5-10). This kind of element is not an electroconductive metal element as disclosed in the present application, since it can be an insulator element as well, and therefore in *Hong* the non-ohmic material element is called a discharging element (col. 2, lines 10-13). In accordance with the above, amended claims 1-20 are new over *Hong*.

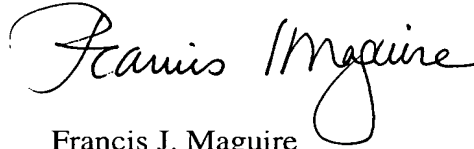
*Hively* teaches (column 3, lines 42-43) that a metal plane layer 120 is a power or ground plane. *Hively* does not disclose that this metal plane layer 120 is an electroconductive element for ESD shielding which is the object of the present invention. *Hively* clearly discloses (column 3, lines 44-49) that ESD shielding is provided by the ESD protection layer (122) made of polymer or other suitable material which is normally an insulator but is rendered temporarily conductive by a high applied electrostatic potential. This ESD protection layer (122) is formed on the ground plane layer (120). The ESD protection element is a non-ohmic material element which acts as an insulator or conductor depending on the electrostatic potential (*Hively* column 2, lines 20-23) which means that the resistance of the non-ohmic protection element depends on current and voltage. This kind of element is not an electroconductive metal element as presently claimed, since it can be an insulator element as well. Claims 1-20 are therefore new over *Hively*.

There is no sense of combining teachings of *Hong* and *Hively* to arrive at solution now disclosed in claims 1-20, because of both *Hong* and *Hively* disclose non-ohmic element. Therefore the claims 1-20 are not obvious for the skilled person in light of *Hong* or *Hively*.

With regard to section 1 of the final Office Action, claims 8 and 13 are objected to. The Examiner apparently has interpreted that in claim 8, the words “integrating” and “integrated” would mean that the electroconductive element is located inside the cover element, which would lead to a contradiction with claim 13. However, when reading claim 8 together with dependent claims 12 and 13, it should be obvious that the intention in saying “integrated” in claim 8 is simply to state that the elements are in close proximity with each other, and therefore the electroconductive element is either inside (claim 12) or outside (claim 13) of the cover element (see original description page 3, lines 26-29). Nevertheless, the wording of claims 8 and 13 have already been amended (see Interview Summary mailed April 6, 2009) to correspond to the wording of claims 1 and 6 in order to overcome the objection of section 1. Withdrawal thereof is requested.

The objections and rejections of the Office Action of December 18, 2008, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1-20 to issue is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink that reads "Francis J. Maguire". The signature is written in a cursive style with a large, looping "M" and a long, sweeping underline.

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